IN THE CLAIMS

This is listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method of monitoring for the presence of hydrophobic liquid at a site comprising:

locating at said site a sensor assembly which comprises a polyvinylidene fluoride membrane which is adapted to take up hydrophobic liquid from the site, ~~comprising~~ radiation input means connected to a radiation source and arranged to irradiate said membrane, and radiation output means connected to a radiation detector and/or analyser arranged to detect and/or analyse radiation which results from the ~~emission of radiation~~ irradiation of said membrane by ~~the source~~ said radiation input means;

causing the radiation input means to irradiate ~~a sensing location~~ said membrane; and

employing said detector/analyser to receive radiation via said radiation output means, the arrangement being such that the nature and/or amount of radiation received by the detector/analyser is affected by the presence of liquid at the ~~sensing location~~ site.

Claims 2-4 (canceled)

Claim 5 (currently amended): A method according to Claim 1 wherein the radiation source and input means are operated to direct radiation towards said ~~sensing location~~ membrane and the detector/analyser and output means are used to receive radiation reflected from the ~~sensing location~~ membrane.

Claim 6 (currently amended): A method according to ~~any of Claims 1 to 4~~ Claim 1 wherein the radiation source and input means are operated to direct radiation towards said ~~sensing location~~ membrane and the detector/analyser and output means are used to receive radiation scattered ~~at said sensing location~~ from said membrane.

Claim 7 (currently amended): A method according to Claim 1 wherein the radiation source and input means are operated to direct radiation towards said ~~sensing location~~ membrane and the detector/analyser and output means are used to receive radiation transmitted through said ~~sensing location~~ membrane.

Claim 8 (canceled)

Claim 9 (currently amended): A method according to Claim 1 including a step of examining the spectroscopic characteristics of the radiation received by the detector/analyser to provide data relating to the chemical nature of liquid at the ~~sensing location~~ site.

Claim 10 (previously presented): A method according to Claim 1 wherein the radiation source and the detector/analyser are remote from the site and are connected to the input and output means, respectively, via waveguide means.

Claim 11 (previously presented): A method according to claim 1 wherein there are a plurality of sensor assemblies which are located at different sites, and the method includes switching the connection of the radiation source and/or the detector/analyser between different sensor assemblies.

Claim 12 (currently amended): [[Sensor]] A sensor assembly for use in monitoring for the presence of hydrophobic liquid at a site, said assembly comprising:

a hydrophobic element comprising a polyvinylidene fluoride membrane which is disposed so that in use it is exposed to the environment at a sensing location and which is adapted to take up hydrophobic liquid; a radiation source arranged to irradiate at least a portion of the hydrophobic element; and a radiation detector and/or analyser arranged to receive radiation resulting from the interaction of the source's radiation with the hydrophobic element.

Claim 13 (original): A sensor assembly according to Claim 12 which includes a housing containing, or coupled to, said radiation source and said radiation detector and/or

analyser; said housing having window means confronting said hydrophobic element; and said radiation source and detector/analyser being disposed or coupled so that radiation from the source can pass outwardly through the window means, and undergo reflection and/or other interaction at the hydrophobic element, interacted radiation passing inwardly through the window means to reach the detector analyser.

Claim 14 (previously presented): An assembly according to Claim 10 wherein the detector/analyser comprises means for spectroscopic analysis.

Claim 15 (previously presented): An assembly according to Claim 12 further comprising a vessel containing a hydrophobic liquid and wherein said hydrophobic element is located at a site potentially contaminated by liquid leaking from the vessel whereby said sensor assembly is operable to detect leakage of the liquid.

Claim 16 (previously presented): An assembly according to Claim 12 adapted to carry out remote monitoring by means of a telecommunication link arranged to transfer data from the sensor assembly to a remote destination.

Claim 17 (previously presented): An assembly according to claim 12 wherein the radiation source and detector/analyser are adapted to be remote from the sensing location, being coupled to waveguide means for conveying radiation to and from the sensing location.

Claim 18 (original): An assembly for carrying out the method of claim 11 and comprising a detector/analyser and/or a radiation source connected to a switching unit which is connected to a plurality of sensor assemblies and is operable to switch the connection of the radiation source and/or the detector/analyser between different sensor assemblies.